

Preface

THE Organizing Committee for the 1990 Joint Southeast/Southwest Regional American Chemical Society Meeting requested that we organize a mini-symposium on the medicinal chemistry of serotonin. Our charge was two-fold, to present sufficient introductory material so as to provide an adequate background for those not currently working in the field, and yet to present state-of-the-art discussions of selected topics. We were free to choose the individual topics. Consequently, the topic selection represents some bias on my part; hopefully, these topics will also be of interest to others. From the viewpoint of a medicinal chemist, structure-affinity relationships (SAFIR) are important and can form the basis of rational drug design. Obviously, an understanding of the pharmacological and clinical significance of serotonin receptors is also necessary. The time allocated for the symposium was insufficient to include coverage of either of these areas in any detail. However, the SAFIR of serotonergic agents has just been reviewed (1) and several excellent monographs on serotonin pharmacology have recently appeared (2-4). The topics specifically selected for this symposium should be attractive to pharmacologists as well as to medicinal chemists and include: molecular modeling/graphics investigations (with emphasis on 5-HT_{1A}, 5-HT₂, and 5-HT₃ receptors), structural relationships between affinity and efficacy (with emphasis on the 5-HT_{1A} system), and receptor cloning. The symposium began with a presentation on serotonin receptor nomenclature and a discussion of standard serotonergic agents. Each speaker was requested to begin their presentation at a rather basic level for those not engaged in serotonin research, and to quickly move to a greater level of complexity so that those currently working in the area might also find the topics timely and of interest. The articles included in this meeting report were subjected to peer review.

The symposium was held in New Orleans, LA on December 5, 1990. The support of the Medicinal Chemistry Division of the American Chemical Society, and the assistance of Dr. Ron Borne, organizer of the entire medicinal chemistry component of the meeting, are gratefully acknowledged.

Richard A. Glennon
Guest Editor

1. Glennon, R. A.; Westkaemper, R. B.; Bartyzel, P. Medicinal chemistry of serotonergic agents. In: Peroutka, S. J., ed. Serotonin receptor subtypes. New York: Wiley-Liss; 1991:19-64.
2. Fozard, J. R., ed. The peripheral actions of 5-hydroxytryptamine. Oxford: Oxford University Press; 1989.
3. Peroutka, S. J., ed. Serotonin receptor subtypes. New York: Wiley-Liss; 1991.
4. Whitaker-Azmitia, P. M.; Peroutka, S. J., ed. The neuropharmacology of serotonin. New York: New York Academy of Science; 1990.